1. **Project Title: Mandeville Aquatic Ecosystem Restoration**

2. Entity/Individual Nominating Project:
   St. Tammany Parish Government, City of Mandeville

3. Contact Information:
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4. Tier 1 Designation/Tier 2 Designation
   Total CIAP Funds Requested $4,000,000.00

5. Parish CIAP Funds Proposed:
   a. Tier 1 $4,000,000.00
   b. Tier 2 $1,000,000.00

6. State CIAP Funds Proposed
   a. Tier 1 $0.00
   b. Tier 2 $3,000,000.00

7. Infrastructure Funds Proposed: $0.00

8. Description and location of Project:
   The City of Mandeville utilizes a unique biological wastewater treatment system. The process of wetland assimilation involves disbursing nitrogen enriched treated sewer effluent into marshland. The beneficial result is increased growth of grass, plants, and trees providing refuge to waterfowl and animals. It impedes saltwater intrusion and inhibits coastal erosion.

   This project would include an upgrade of the existing wastewater treatment plant and construction of discharge structure and piping system for wetland assimilation.

Mandeville's wastewater facility is located on Mandeville High Blvd. in Mandeville, LA with construction of 2.5 miles of force main for disbursement of treated effluent into 1.7 square miles of uninhabited wetland adjacent to the western border of the City of Mandeville.

9. Project Type:
Conservation, restoration and protection of coastal area, including wetland

10. Project Justification:
The Aquatic Restoration Project will double the City's wastewater intake providing quality sanitary service to the area while enhancing local marshland. The proposed project will also provide treatment capacity that will allow Mandeville to accept flows from new construction and development as a result of relocation from Hurricane Katrina. This area experienced an eight foot tidal surge during Hurricane Katrina while Hurricane Rita inundated the area with another seven foot tidal surge and consistent tidal motion. The results of both storms have severely eroded this important floodplain. The process of wetland assimilation will increase growth of flora and fauna. It impedes saltwater intrusion and inhibits coastal erosion. Although the waters of Lake Pontchartrain are brackish, the tidal surge from Hurricane Katrina brought in salt water from the Gulf of Mexico. The emersion of freshwater plants with high saline content water will adversely affect area the wildlife in this area.

11. Project cost share: $330,000.00
Mandeville has allocated funds in that amount for Phase I retrofit of existing wastewater treatment plant for implementation of pipeline as well as all architectural and engineering plans and documentation that have been prepared by the City of Mandeville. Project is ready to be bid.

CRITERIA TO BE USED TO EVALUATE PROPOSED COASTAL RESTORATION & CONSERVATION PROJECTS

1. Is the proposed project fee of issues that may impact timely implementation of the project features?
YES. Engineering and construction plans are completed and all property issues and servitudes are resolved.

2. Is the proposed project linked to a regional strategy for maintaining established landscape features critical to a sustainable ecosystem structure and function?
YES. The proposed project is an integral part of the St. Tammany Parish Wastewater Consolidation Program. The Consolidation Program uses a regional approach to reduce the number wastewater discharges located in geographically designated wastewater management areas through the construction of regional conveyance lines and expansion of existing utilities sites to develop said sites into

a regional treatment facility. The proposed improvements to the wetland assimilation process will allow the City to accept sewerage flows from residential and commercial properties, many of which are contributing to the areas non-point pollution problems because they are utilizing on-site septic systems, or connected to hydraulically overloaded package wastewater treatment plants. For example, in completed, this project will allow the City to accept flows from eight (8) existing treatment plants, which currently discharge directly into local water bodies, and discharge the treated effluent through the wetlands. The property associated with this project (Dendinger Property) was acquired by the City of Mandeville in 2001 and will be preserved in its natural state and kept out of commerce and mitigation.

3. Does the proposed project protect health and safety or infrastructure of national, state, regional or local significance?
   THIS PROJECT WOULD PROTECT HEALTH AND SAFETY OF NATIONAL, STATE, REGIONAL, AND LOCAL SIGNIFICANCE in the following ways:
   - Aid recovery of a 1200 acre freshwater marshland.
   - Provide floodplain areas for increased drainage capacity
   - Preserve native flora and fauna
   - Increase capacity of wastewater intake for increased population and development
   - Provide regional sanitary sewerage systems for existing commercial and residential properties thereby eliminating inadequate individual systems
   - Decrease Point Source and Non-Point Source Pollution from inadequate individual systems
   - To protect property from rising water by maintaining important drainage floodplains
   - To increase storm water drainage capacity
   - Prevent coastal erosion
   - Preserve natural scenic waterways

4. How cost effective is proposed project?
   HIGHLY COST EFFECTIVE. The wetland restoration project will increase the City's wastewater treatment from 2 MGD (million gallons daily) to 4 MGD. The costs of construction for a new, mechanical treatment plant that would handle this capacity would far exceed the costs requested for wetland assimilation. From a regional perspective the project is an efficient and cost effective means of providing regional wastewater treatment to un-sewered areas and those areas being serviced by small package plants.

5. What is the certainty of benefits resulting from implementation of the proposed project?
   100%. A Use Attainability Analysis from Dr. John Day, LSU Coastal Ecology Department specific for the Tchefuncte Marsh area determined positive impact for use of wetland assimilation.

6. Does the proposed project address an area of critical conservation/restoration need or a high land loss area?
   YES. Ownership of 1200acre wetland tract by City of Mandeville will keep area out of commerce and mitigation while conserving the Bayou Chinchuba Basin floodplain.

7. How sustainable are the benefits of the proposed project?
   HIGH. A regionalized wastewater system will bring increased effluent capacity providing continual inundation of coastal area with freshwater and nutrients.